

IN THE CLAIMS

Please amend the claims as follows:

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1. (Amended) [Process] A process for the production of an electrochromic coating on a substrate by cathode sputtering of a target in a coating atmosphere containing a noble gas, in particular argon, and hydrogen ions, [characterized in that] wherein at least one gaseous hydrocarbon is added to the coating atmosphere.
2. (Amended) [Process] A process according to claim 1, [characterized in that] wherein said at least one gaseous [saturated] hydrocarbon is a saturated hydrocarbon [added to the coating atmosphere].
3. [Process] A process according to claim 2, [characterized in that] wherein [methane is used as] said saturated hydrocarbon is methane.
4. [Process] A process according to claim 2, [characterized in that] wherein said saturated hydrocarbon is selected from the group consisting of ethane, propane [or] and butane [is used as hydrocarbon].

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5. [Process] A process according to [one of claims 1 to 4, characterized in that] claim 1, wherein oxygen is additionally added to the coating atmosphere.
6. (Amended) [Process] A process according to claim 5, [characterized in that] wherein the volumetric ratio of added hydrocarbon to added oxygen is in the range 3:1 to 1:3, in particular approximately 1:1.
7. (Amended) [Process] A process according to claim 5 [or 6], [characterized in that] wherein the volumetric ratio of noble gas, in particular argon, to oxygen is in the range of 3:1 to 1:3, in particular approximately 1:1.
8. (Amended) [Process] A process according to [one of claims 1 to 7, characterized in that] claim 1, wherein operation takes place at a total pressure of the coating atmosphere of $0.3 \cdot 10^{-2}$ mbar to 10^{-1} mbar, in particular of $1 \cdot 10^{-2}$ mbar to $4 \cdot 10^{-2}$ mbar.
9. (Amended) [Process] A process according to [one of claims 1 to 8, characterized in that] claim 1, wherein a target consisting of tungsten or of a tungsten alloy is used.

10. (Amended) [Process] A process according to [one of claims 1 to 9, characterized in that] claim 1, wherein a target containing molybdenum, titanium, cerium, vanadium and/or zirconium is used.

11. (Amended) [Process] A process according to [one of claims 1 to 10, characterized in that] claim 1, wherein the electrochromic coating (16, 20) is applied with a thickness in the range of 50 nm to 500 nm.

12. (Amended) [Electrochromic] An electrochromic element with at least one electrochromic coating (16, 20) which has been produced in accordance with the [according to a] process [according to one of the foregoing claims] of claim 1.

13. (Amended) [Electrochromic] An electrochromic element according to claim 12, [characterized in that] wherein Li⁺ ions are used as charge carriers.